



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/587,888	06/06/2000	Austen John Britton	190-1453	8111

7590 06/30/2004

William M Lee, Jr
Barnes & Thornburg
P O Box 2786
Chicago, IL 60690-2786

EXAMINER

ZHEN, WEI Y

ART UNIT	PAPER NUMBER
----------	--------------

2122

DATE MAILED: 06/30/2004

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/587,888	Applicant(s) BRITTON ET AL.	
	Examiner Wei Y Zhen	Art Unit 2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,7,8,13 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7,8,13,16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment filed on March 8th, 2004.
2. Claims 1, 7, 8, 13, and 16 remain rejected under U.S.C. 103(a).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 7, 13, and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Rosensteel et al. (U.S. Patent Number 6,167,405) in view of Coker (U.S. Patent Number 5,640,550).

In regard to Claim 1, Rosensteel teaches defining a multi-dimensional data warehouse and source databases as a set of entity-relationship data models (Figure 1c, item 12-4 and Column 5, lines 18-27). Rosensteel teaches creating a sequence of SQL statements, which are instructions for loading the multi-dimensional data warehouse from the plurality of source databases (Column 1, lines 58-67 and Column 2, lines 1-5). These statements are obviously stored in a file. Rosensteel does not teach that the source file contains a plurality of directives, nor does he teach pre-processing the directives in the source file by (i) accessing said data models to pull information from said entity-relationship data models about the structures of said source databases and said multi-dimensional data warehouse, and (ii) using said information to generate said code for loading the multi-dimensional data warehouse from a plurality of source

Art Unit: 2122

databases, as well as appending said code generated by pre-processing said plurality of high-level directives to an executable destination file.

Coker, however, does teach automatically (Column 7, lines 11-14) processing COBOL instructions by accessing said data models to pull information from said entity-relationship data models about the structures of said source databases and said multi-dimensional data warehouse (Column 28, lines 30-35), and using this information to generate code (Column 28, lines 26-35) for loading the database. The SQL statements generated do load the database, since SQL statements, when executed produce a resulting database. Coker also teaches generating an object file, which is an executable destination file, with the generated code produced from the translated COBOL statements (Column 28, lines 36-40). Therefore, it would have been obvious to one of ordinary skill in the art at the invention to define a multi-dimensional data warehouse and source databases as a set of entity-relationship data models, create a sequence of SQL statements, which are instructions for loading the multi-dimensional data warehouse from the plurality of source databases, as taught by Rosensteel, where the source file contains a plurality of directives, and pre-processing the directives in the source file by (i) accessing said data models to pull information from said entity-relationship data models about the structures of said source databases and said multi-dimensional data warehouse, and (ii) using said information to generate said code for loading the multi-dimensional data warehouse from a plurality of source databases, as well as appending said code generated by pre-processing said plurality of high-level directives to an executable destination file, as taught by Coker, since this allows the user to write source code statements for a database without knowing the details of the database.

Claims 7, 13, and 16 are method, system, and information carrier claims that correspond with Claim 1, and are rejected for the same reasons as Claim 1, where Rosensteel teaches a system and information carrier for carrying out said method of Claims 1 and 7 (Figure 1a).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosensteel et al. (U.S. Patent Number 6,167,405) in view of Coker (U.S. Patent Number 5,640,550) and further in view of Access 97 Macro & VBA Handbook by Susann Novalis, 1997 (hereinafter Novalis) and Backes et al. (U.S. Patent Number 5,231,693).

For a specific rejection of Claim 8, see the office action mailed on January 15th, 2004.

Response to Arguments

6. Applicant's arguments filed March 8th, 2004 have been fully considered but they are not persuasive.

Specifically, the applicant argues that Coker does not teach accessing any data models to pull information from them about the structures of any databases, and rather teaches looking at a data dictionary, which is into an ER model (Page 8 Paragraph 4 to Page 9, Paragraph 1).

However, Coker does teach "obtaining the data desired by the COBOL program based on the data in the SQL orientated database (Column 28, lines 31-33).

The applicant further argues that Coker does not teach appending code to an executable file that has been generated by the directives (Page 9, Paragraph 2). However, Coker does teach generating an executable with the COBOL statements as well as the SQL statements, and so this executable contains this appended code (Column 28, lines 36-40). Generally, when a directive is parsed, code is put in its place, which is then compiled and placed in the object file. Furthermore,

Art Unit: 2122

the applicant states that “each SQL query must be executed immediately after it is generated” (Column 9, Paragraph 2). However, there is no indication of this in Coker, especially since this code is being generated during compilation.

The applicant further argues that the directives taught in Coker are not the directives taught by the applicant (Page 9, Paragraph 3). It should be noted that the COBOL statements that are translated into SQL statements, can be viewed as directives, since they act as placeholders for a new set of expanded code during compilation.

Finally, the applicant claims that there is no motivation to combine Rosensteel and Coker, since Coker is not concerned with the creating and populating of a data warehouse or any kind of database. Coker, however, does teach generating a database (Figure 1, item 4), and thus like Rosensteel, is concerned with database creation and population.

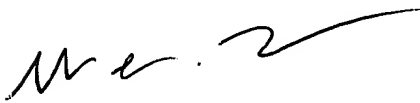
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wei Y Zhen whose telephone number is (703) 305-0437. The examiner can normally be reached on Monday-Friday, 8 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Tuan Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2122

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Wei Zhen
Primary Examiner
6/28/2004